

Approved Minutes
Agricultural Sub-Work Group #6
Conjunctive Use to Increase Springtime Flows
Meeting of May 26, 1989

The meeting was chaired by Warren Cole.

Bill Johnston, Water Rights Consultant to Modesto Irrigation District, and Tim Durbin, Ground Water Hydrologist Consultant to Modesto and Turlock Irrigation Districts, presented results of a study done for the Districts. This study was a cursory review of the Board proposal to reoperate New Don Pedro Reservoir and the local ground water basins so as to increase Delta inflows during the April-July period. Their presentation included a description of the current system and how it is presently operated. State Water Resources Control Board operation studies of Don Pedro show in wet years about 300,000 acre-feet per year would be available for a spreading operation in MID and TID.

Using overhead slides (copies attached) Tim Durbin presented an analysis of geologic and ground water conditions in the area using data from various sources including a USGS paper published in 1964, "Use of Ground Water Reservoirs for Storage of Surface Water in the San Joaquin Valley, California" (WSP 1618), and California Department of Water Resources Ground Water Depth Records (1986).

Due to limitations in the extent, depth and pore capacity of the more permeable soils and limited unsaturated soil space, it was concluded that an annual recharge and pumping operation would increase, by only a small fraction, the amount of water now available for instream uses.

In addition, it was shown that most of the better potential recharge areas are fully developed, primarily in orchards, and ponding would be incompatible with farming operations. Purchase of the land would probably be required to conduct the type of conjunctive use operation visualized.

The Merced ID area was not studied but a similar situation exists there.

Bill Johnston presented overhead slides (copies attached) to review SWRCB assumptions, necessary operating assumptions, and District and farmer problems in regard to carrying out the proposed recharge and conjunctive use program. Rough estimated costs to implement the program were also presented.

The question was raised as to the feasibility of using off-stream surface storage instead. This would be a whole new area of study beyond the original intent of the workshop.

It was decided that the next step was to report findings to the main workshop to decide if further study was warranted.¹ No further meetings of the sub-work group were scheduled.

Attachments

¹ Findings were presented June 26, 1989. There were no suggestions made at that time for further study.